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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/625,353	07/23/2003	Roy Stubbs	50771US006	8599		
32692 759	08/11/2006		EXAM	EXAMINER		
3M INNOVATIVE PROPERTIES COMPANY			MORGAN,	MORGAN, EILEEN P		
PO BOX 33427 ST. PAUL, MN 55133-3427			ART UNIT	PAPER NUMBER		
			3723			
			DATE MAILED: 08/11/2006			

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
Office Action Summary		10/625,353	STUBBS, ROY				
		Examiner	Art Unit				
		Eileen P. Morgan	3723				
	The MAILING DATE of this communication ap						
Period fo	or Reply						
WHIC - Exter after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPL CHEVER IS LONGER, FROM THE MAILING D resions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. O period for reply is specified above, the maximum statutory period re to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailined patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION (36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from a, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status							
1) 又	Responsive to communication(s) filed on 26 N	fav 2006.					
·	This action is FINAL . 2b) ☐ This action is non-final.						
′=	, _						
	closed in accordance with the practice under	Ex parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.				
Dispositi	on of Claims						
4)⊠	4)⊠ Claim(s) <u>1-5,7-13</u> is/are pending in the application.						
	4a) Of the above claim(s) is/are withdra						
5)	Claim(s) is/are allowed.						
6)⊠	6)⊠ Claim(s) <u>1-5,7-13</u> is/are rejected.						
7)	Claim(s) is/are objected to.						
8)□	Claim(s) are subject to restriction and/o	or election requirement.					
Applicati	on Papers						
9)[The specification is objected to by the Examine	er.					
10)	The drawing(s) filed on is/are: a) acc	epted or b) objected to by the I	Examiner.				
	Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).				
	Replacement drawing sheet(s) including the correct	tion is required if the drawing(s) is ob	jected to. See 37 CFR 1.121(d)) .			
11)	The oath or declaration is objected to by the E	xaminer. Note the attached Office	Action or form PTO-152.				
Priority (ınder 35 U.S.C. § 119						
a)l	Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureasee the attached detailed Office action for a list	ts have been received. Is have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage				
2) Notice 3) Information	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:					

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DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 5 are rejected under 35 U.S.C. 102(a) as being anticipated by German 9407622.

The German reference discloses a direct coated sponge abrasive material directly bearing a securing hook means, wherein the abrasive layer comprises a coating of binders and abrasive material on the surface of the sponge material.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1,2,3,4,10-12 rejected under 35 U.S.C. 103(a) as being unpatentable over German in view of Hong 4,202,139.

The German reference does not disclose the sponge having securing means of loop material or in combination with a strap. However, Hong et al. teaches an abrasive

sponge with loop securing means (20) on the back side for engagement with hooks, wherein a strap (25) is provided having hook engaging means (24). Therefore, it would have been obvious to one of ordinary skill in the art at time invention was made to provide German '622 with a strap in order to use the abrasive sponge with a hand without the need to grasp the whole sponge. The strap of Hong is in the shape of a ring made of two straps, one having the opposite securing surface. However, it would have been obvious to use a single strap with the opposite securing surface on the ends since both work equally well and would have been within the level of ordinary skill in the art. In addition, to substitute the hooks of German '622 with loop securing means, as taught by Hong would have been obvious to one of ordinary skill in the art at time invention was made since both types of securing means work equally well and the choice of either would be within the level of ordinary skill. And, it would have been obvious since it has been held that a mere reversal of essential working parts of a device involves only routine skill in the art. In re Einstein, 8 USPQ 167. In regard to claims 10-12, it would have been an obvious design expedient at time applicant's invention was made to a person of ordinary skill in the art to use nylon loops based on its suitability for the intended use. In re Leshin, 125 USPQ 416. The sponge material and density would have been obvious design choices dependent on abrading parameters.

Claims 7-9 rejected under 35 U.S.C. 103(a) as being unpatentable over German '622 in view of Cheney.

Germany '622 does not teach a back-up pad. However, Cheney teaches a sanding pad (42) with abrasive (50) on one side and on the other side hook and loop

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material (53) to be attached to a back-up pad (24) via mating surface (55) for use with a hand or powered sander (Abstract). Therefore, it would have been obvious to one of ordinary skill in the art at time invention was made to provide Germany '622 with a back-up pad assembly, as taught by Cheney, in order to perform various sanding operations with one back-up pad while readily changing sanding pads of varying abrasive nature (via hook and loop).

Claims 1-5, 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hong et al.-4,202,139 in view of Hurst-2,780,533.

Hong discloses an open cell polyurethane sponge material (12) free of abrasive material with an abrasive layer (14) on one side and a loop material (20) on the other side for attaching to a strap (23,25) to be used for hand sanding. The strap of Hong is in the shape of a ring made of two straps, one having the opposite securing surface. However, it would have been obvious to use a single strap with the opposite securing surface on the ends since both work equally well and would have been within the level of ordinary skill in the art. The sponge of Hong uses a psa abrasive sheet to be attached thereto and does not disclose the sponge being a 'direct-coated sponge'. However, Hurst teaches an open cell sponge material that is directly coated with a binder/abrasive mixture (col.4, line 69). This type of abrasive material can have a controlled resiliency thus allowing the abrasive article to be subjected to localized areas of tension, compression and/ or torsion without rupture (col. 2, lines 35-55). Therefore, it would have been obvious to one of ordinary skill in the art at time invention was made to substitute the abrasive sponge of Hong with a direct coated abrasive sponge, as

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taught by Hurst, in order to increase flexibility which will decrease tear/rupture prolonging life of abrasive article.

In regard to claim 3, to substitute the loop securing means, as disclosed by Hong would have been obvious to one of ordinary skill in the art at time invention was made since both types of securing means work equally well and the choice of either would be within the level of ordinary skill. And, it would have been obvious since it has been held that a mere reversal of essential working parts of a device involves only routine skill in the art. In re Einstein, 8 USPQ 167. In regard to claims 10-12, it would have been an obvious design expedient at time applicant's invention was made to a person of ordinary skill in the art to use nylon loops based on its suitability for the intended use. In re Leshin, 125 USPQ 416. The sponge density would have been an obvious design choice dependent on abrading parameters.

Claims 7-9 rejected under 35 U.S.C. 103(a) as being unpatentable over Hong in view of Hurst, as applied to claims above, and further in view of Cheney.

Hong nor Hurst teach a back-up pad. However, Cheney teaches a sanding pad (42) with abrasive (50) on one side and on the other side hook and loop material (53) to be attached to a back-up pad (24) via mating surface (55) for use with a hand or powered sander (Abstract). Therefore, it would have been obvious to one of ordinary skill in the art at time invention was made to provide Hong in view of Hurst with a back-up pad assembly, as taught by Cheney, in order to perform various sanding operations

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with one back-up pad while readily changing sanding pads of varying abrasive nature (via hook and loop).

Response to Arguments

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues that the strap of Hong is not one piece as now recited by claim

1. However, this rejection has been modified to state that this would have been an obvious and within the level of ordinary skill in the art. The Germany'622 does discloses a 'direct-coated sponge' having four minor sides. In regard to claim 7, in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eileen P. Morgan whose telephone number is 571.272.4488. The examiner can normally be reached on Monday-Thursday, 7am-3:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on 571.272.4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EM August 6, 2006

> Eileen P. Morgan Primary Examiner

Joseph J. Hail, III Supervisory Patent Examiner Technology Center 3700